IN THE CLAIMS

Please amend the claims as follows.

1-15. (canceled)

16. (currently amended) A method for separating single stranded nucleic acid from double stranded nucleic acid, comprising the steps of:

contacting a mixture comprising both single stranded nucleic acid and double stranded nucleic acid with a first liquid comprising a chaotropic agent and a nucleic acid binding solid phase, wherein the first liquid has a composition such that the double stranded nucleic acid binds to the solid phase;

separating the solid phase from a supernatant containing the single stranded nucleic acid; and

contacting the supernatant with ~~a second liquid comprising~~ a second nucleic acid binding solid phase~~, in the presence of a chaotropic agent~~, and a second liquid consisting essentially of material selected from the group consisting of:

a) a chaotropic agent;

b) a chaotropic agent and a chelating agent;

c) a chaotropic agent and divalent positive ions; and

d) a chaotropic agent, a chelating agent and divalent positive ions,

wherein the second liquid has a composition such that the resulting mixture of supernatant and second liquid allows for binding of the single stranded nucleic acid to the second solid phase.

17. (previously presented) The method according to claim 16, wherein the first liquid comprises a chaotropic agent in concentration between about 1-10M, and a chelating agent, and has a pH between about 2 and 10.

18. (previously presented) The method according to claim 17, wherein the chelating agent is EDTA, which is present in a concentration between about 10 mM and 1 M.

19. (previously presented) The method according to claim 18, wherein the first liquid comprises at least about 100 mM EDTA and guanidinium salt as a chaotropic agent.

20. (previously presented) The method according to claim 16, wherein the chaotropic agent is guanidinium thiocyante.

21. (currently amended) ~~A~~The method according to claim 20, whereby the first liquid has the constitution of a buffer prepared by dissolving about 120g guanidinium thiocyanate in about 100ml 0.2M EDTA (pH=8).

22-27. (canceled)

28. (previously presented) The method according to claim 16, wherein the solid phase is silicum based.

29. (previously presented) The method according to claim 28, wherein the solid phase is silica.

30. (previously presented) The method according to claim 29, wherein the silica is in the form of particles having a size between about 0.05 and about 500 micrometers.

31. (previously presented) The method according to claim 16, wherein the solid phase is separated from the supernatant by centrifugation.

32-37. (canceled)

38. (canceled) A method for separating single stranded nucleic acid from double stranded nucleic acid, comprising the steps of:

contacting a mixture comprising both single stranded and double stranded nucleic acid with a first liquid comprising a chaotropic agent and a nucleic acid binding solid phase, wherein the first liquid has a composition such that the double stranded nucleic acid binds to the solid phase;

separating the solid phase from a supernatant containing the single stranded nucleic acid; and

contacting the supernatant with a second liquid comprising a second nucleic acid binding solid phase, in the presence of a chaotropic agent, a chelating agent and divalent positive ions, wherein the second liquid has a composition such that the resulting mixture of supernatant and second liquid allows for binding of the single stranded nucleic acid to the second solid phase.

39. (currently amended) The method according to Claim ~~38~~16, wherein the concentration of the divalent positive ions is the same as the concentration of the chelating agent.

40. (currently amended) The method according to Claim ~~38~~16, wherein the chelating agent is EDTA and the ions are Mg^{2+} ions.

41. (currently amended) The method according to Claim ~~38~~16, wherein the chaotropic agent is a guanidinium salt.

42. (canceled) The method according to Claim 41, wherein the guanidinium salt is guanidinium isothiocyanate.

43. (previously presented) The method according to Claim 42, wherein the second liquid has the constitution of a buffer prepared by dissolving about 120g guanidinium isothiocyanate in about 100ml 0.35M TRIS HCl (pH 6.4) and adding about 22ml 0.2 M

EDTA (pH 8.0) and about 9.1g Triton X-100™ (polyethoxylated p-isooctyl-phenol), homogenizing the solution and adding $MgCl_2$ to a final concentration of about 0.25M.

44. (canceled) A method for separating single stranded nucleic acid from double stranded nucleic acid, comprising the steps of:

contacting a mixture comprising both single stranded nucleic acid and double stranded nucleic acid with a first liquid comprising a chaotropic agent and a nucleic acid binding solid phase, wherein the first liquid has a composition such that the double stranded nucleic acid binds to the solid phase;

separating the solid phase from a supernatant containing the single stranded nucleic acid; and

contacting the supernatant with a second liquid comprising a second nucleic acid binding solid phase, in the presence of a chaotropic agent and divalent positive ions, wherein the second liquid has a composition such that the resulting mixture of supernatant and second liquid allows for binding of the single stranded nucleic acid to the second solid phase.